

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Method~~ A method for attaching a protein to a conductive support by means of a pyrrole polymer, comprising ~~the following steps~~:

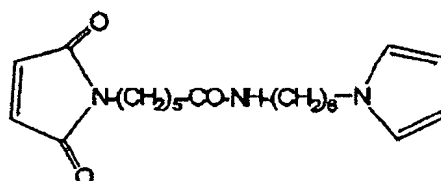
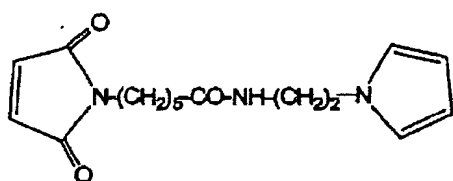
- coupling of the protein to be attached with a pyrrole monomer so as to obtain a first solution of a protein-pyrrole coupling compound,
- preparation of a second solution of the pyrrole monomer not coupled to the protein,
- mixing of said first solution with said second solution so as to obtain an electropolymerization solution,
- electropolymerization of the pyrrole and of the protein coupled to the pyrrole on at least one given area of the conductive support using said electropolymerization solution, said electropolymerization being carried out with a charge of less than $50 \mu\text{C}/\text{mm}^2$ for a synthesis time of less than 1000 ms, so as to obtain a film of copolymer having a thickness of less than or equal to 10 nm.

Claim 2 (Currently Amended): ~~Method~~ The method according to Claim 1, ~~in which~~ wherein the at least one conductive area on which the electropolymerization is carried out is at least one block of a biosensor support.

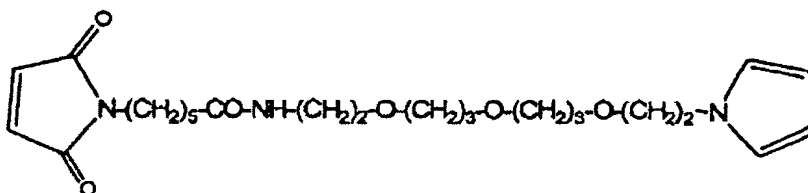
Claim 3 (Currently Amended): ~~Method~~ The method according to Claim 1, ~~in which~~ wherein the coupling of the protein to be attached with pyrrole is carried out by means of activation of the pyrrole followed by coupling of the activated pyrrole to the protein to be attached.

Claim 4 (Currently Amended): ~~Method~~ The method according to Claim 3, ~~in which~~
wherein the activation of the pyrrole is carried out by means of N-hydroxysulphosuccinimide
or of maleimide.

Claim 5 (Currently Amended): ~~Method~~ The method according to Claim 3, ~~in which~~
wherein the protein-pyrrole coupling compound is ~~chosen~~ at least one selected from the
group consisting of the following compounds:



and



Claim 6 (Currently Amended): ~~Method~~ The method according to Claim 1, ~~in which~~ wherein two proteins are attached to the pyrrole polymer successively and on two different given areas of the conductive support.

Claim 7 (Currently Amended): ~~Method~~ The method according to Claim 1, ~~in which~~
wherein the protein is chosen at least one selected from the group consisting of an enzyme, an
antibody, an antigen, a hormone and a receptor.

Claim 8 (Currently Amended): ~~Use of a method according to any one of the preceding Claims 1 to 7,~~ A method for producing a monosensor or a multisensor comprising utilizing the method according to Claim 1.

Claim 9 (Currently Amended): ~~Use of a method according to any one of the preceding Claims 1 to 7,~~ A method for producing a biochip comprising utilizing the method according to Claim 1.